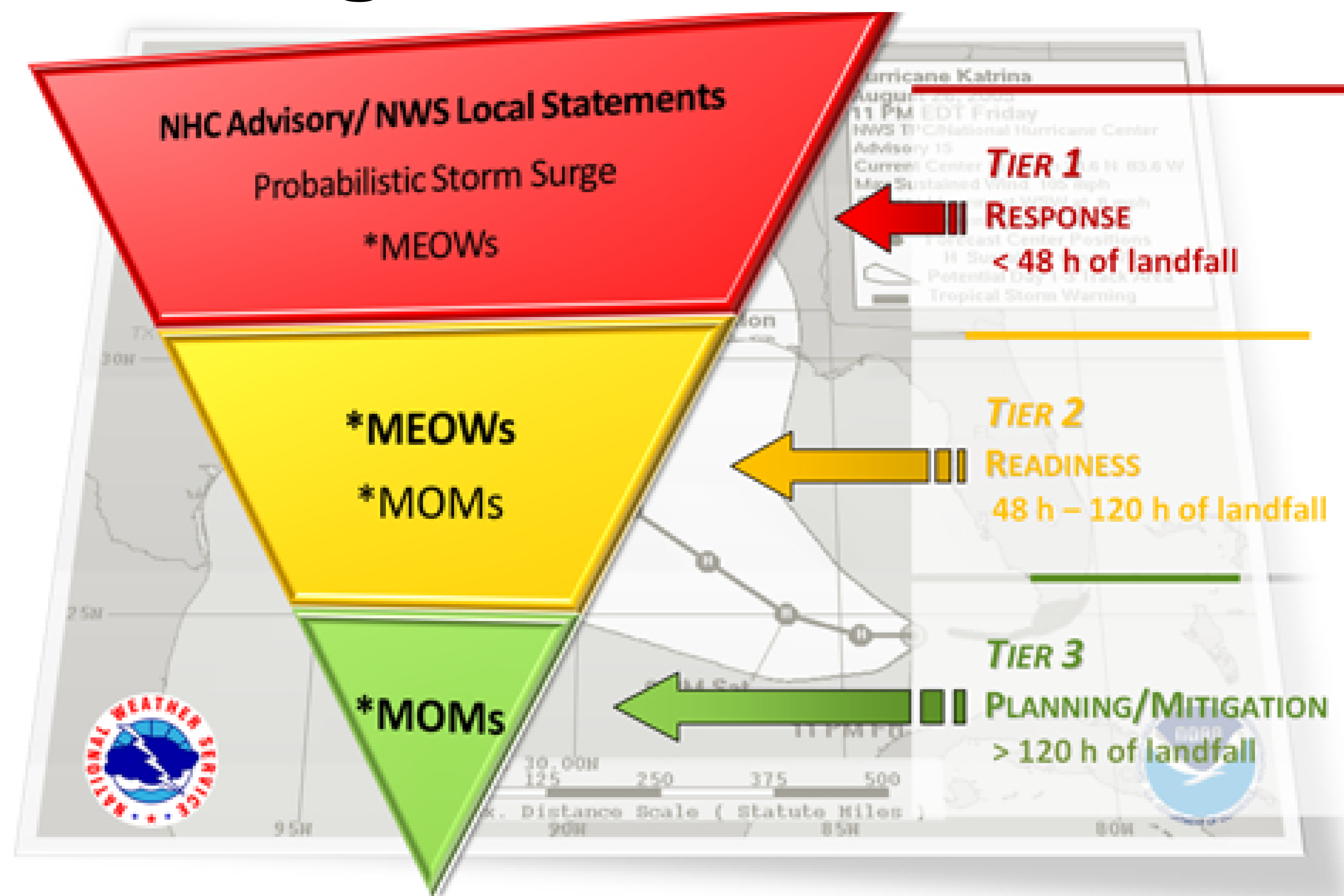


Which Storm Surge Product Should I Use When?



The National Hurricane Center's (NHC) Storm Surge Product Decision Support Wedge offers a three-tiered approach to utilizing available storm surge data for decision support. While hurricane track forecasting continues to improve, the average track error 48 hours prior to landfall for the Atlantic basin is still considerable, now near 100 nautical miles. Moreover, average intensity forecast error 48 hours prior to landfall is 15 kt. These average errors could mean the difference between a Category One hurricane making landfall in Pensacola, Florida, or a Category Three hurricane striking New Orleans, Louisiana.

The 24-hour to 48-hour window is often critical for decision-making. It is important not to focus solely on one storm surge product within this window. Storm specific uncertainties are accounted for in the probabilistic storm surge (p-surge) product, while *MOMs and *MEOWs provide a worst case storm surge estimate at a regional level. The Hurricane Local Statement (HLS), available from the National Weather Service (NWS) Weather Forecast Offices (WFO) upon the issuance of tropical cyclone watches and warnings, summarizes local impacts (i.e., county or parish level impacts) from storm surge. Consequently, understanding the four available storm surge products and carefully reviewing where each falls within the three-tiered decision support wedge allows decision-makers to make the most informed decisions within current forecast limitations.

As a general rule for using this decision support wedge:

- Consider all products in each tier
- Always use the *MOMs or *MEOWs
- As tier number decreases, number of recommended products increases (remember: 3-1, 2-2, 1-3)

Tier	Timeline	Recommended Decision Support Storm Surge Products	Number of Recommended Products
	< 48 h of forecast landfall	NHC Advisory / NWS Local Statements Potential Storm Surge Flooding Map Probabilistic Storm Surge (P-Surge) *MEOWs	4
Tier 2	48 h - 120 h of forecast landfall	*MEOWs *MOMs	2
Tier 3	> 120 h of forecast landfall	*MOMs	1

* Provided average errors inherent in NHC intensity forecasts (discussed above) and the sensitivity of storm surge forecasts to storm intensity, it is recommended that emergency managers employ MOMs or MEOWs for a hurricane one category higher than what is forecast by NHC at landfall.

This tool is designed as an aid for emergency managers and trained officials only. It is not intended to be used by the general public for making life or death decisions. Closely follow all instructions from local and state emergency management during a hurricane threat. If you are asked to evacuate, you should do so without delay.

Available at: <http://www.nhc.noaa.gov/surge/products.php>